

Serial No. 09/687,662
Attorney Docket No.: SEDN/247C1P4
Page 2

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A method for providing program data, interactive program guide (IPG) to a terminal, the method comprising:
broadcasting continually, from a head-end to a terminal, a fraction of a plurality of available interactive program guide (IPG) pages including program listings associated with at least one time slot to said terminal;
receiving, by the head-end from the terminal, a request message from the terminal for at least one IPG page, including program listings associated with at least one different time slot from the broadcasted IPG pages for a requested IPG page, the requested IPG page not being one of the continually broadcast IPG pages;
encoding, by the head-end, only a guide portion of the requested IPG page using a temporal slice persistence encoding scheme, the requested IPG page including the guide portion and a background portion;
assigning, by the head-end, the encoded IPG page with a particular packet identifier (PID) to the encoded guide portion; and
demand-casting sending, by the head-end to the terminal, the encoded guide portion IPG page a limited number of times in response to receiving the request message.
2. (Currently amended) The method of claim 1, wherein the encoded guide portion of the requested IPG page is sent once in response to receiving the request message.
3. (Currently amended) The method of claim 1, further comprising:
waiting for an acknowledgement indicating that the guide portion of the requested IPG page has been received; and
upon receiving the acknowledgement, terminating the sending of the encoded guide portion of the requested IPG page.

401616_1

Serial No. 09/687,662
Attorney Docket No.: SEDN/247CIP4
Page 3

4. (Currently amended) The method of claim 1, wherein the encoded guide portion of the requested IPG page is sent once initially in response to receiving the request message, the method further comprising:

waiting for an acknowledgement indicating that the guide portion of the requested IPG page has been received; and

if the acknowledgement is not received within a particular time period, resending the encoded guide portion of the requested IPG page a limited number of times.

5. (Currently amended) The method of claim 4, wherein the encoded guide portion of the requested IPG page is resent once in response to not receiving the acknowledgement within the particular time period.

6. (Currently amended) The method of claim 1, wherein the encoded guide portion of the requested IPG page is sent once initially in response to receiving the request message, the method further comprising:

receiving a second~~another~~ request message from the terminal for the requested IPG page; and

resending the encoded guide portion of the requested IPG page a limited number of times in response to receiving the second~~another~~ request message.

7. (Currently amended) The method of claim 1, wherein the particular PID used for the encoded guide portion of the requested IPG page is a PID assigned to the terminal for IPG delivery.

8. (Currently amended) The method of claim 1, further comprising:
signaling, by the head-end to the terminal, the identity of the particular PID used for the guide portion of the requested IPG page.

9. (Original) The method of claim 8, wherein the signaling is achieved via an in-band channel.

401616_1

Serial No. 09/687,662
Attorney Docket No.: SEDN/247CIP4
Page 4

10. (Original) The method of claim 8, wherein the signaling is achieved via an out-of-band channel.

11. (Currently amended) The method of claim 1, wherein the particular PID used for the guide portion of the requested IPG page is computed based on a particular computation scheme.

12. (Currently amended) The method of claim 1, wherein the particular PID used for the guide portion of the requested IPG page is a PID assigned to the terminal for a duration of a communication session with the terminal.

13. (Currently amended) A method for receiving program data ~~regenerating interactive program guide (IPG) at a terminal, the method comprising:~~

receiving a continual broadcasting at a terminal from a head-end, a fraction of a plurality of available interactive program guide (IPG) pages including program listings associated with at least one time slot to said terminal;

sending ~~receiving, from the terminal to the head-end, a request message for a requested IPG page, the requested IPG page not being one of the continually broadcast IPG pages~~ particular IPG page having included therein a guide portion specific to the page, said particular IPG page not being one of said broadcasted IPG pages;

sending a request message to a head-end for the requested IPG page;

receiving, at the terminal from the head-end, a transmission of at least the guide portion of the requested IPG page, wherein the guide portion of the requested IPG page is transmitted a limited number of times in response to the request message; and

regenerating at least the guide portion of the requested IPG page from the received transmission, the requested IPG page including the guide portion and a background portion.

401616_1

Serial No. 09/687,662
Attorney Docket No.: SEDN/247CIP4
Page 5

14. (Currently amended) The method of claim 13, further comprising:
sending an acknowledgement to the head-end upon receiving the
transmission for the guide portion of the requested IPG page.

15. (Currently amended) The method of claim 13, further comprising:
prior to receiving the transmission for the guide portion of the requested IPG
page, and if the guide portion of the requested IPG page is not received within a
particular time period after sending the request message, resending the request
message to the head-end for the requested IPG page.

16. (Currently amended) The method of claim 13, wherein the
transmission is assigned a particular packet identifier (PID) at the head-end.

17. (Original) The method of claim 16, wherein the particular PID used for
the transmission is a PID assigned to the terminal for IPG delivery.

18. (Currently amended) The method of claim 16, further comprising:
receiving a message from the head-end indicating the particular PID assigned
for the transmission of the guide portion of the requested IPG page.

19. (Currently amended) A system for providing program data, comprising:
a video encoder operative to encode a plurality of continually broadcast
interactive program guide (IPG) pages~~broadcasted program guide pages~~ and at
~~least a~~ guide portion of a requested ~~interactive program guide (IPG) page~~ using a
temporal slice persistence encoding scheme, and to respectively generate a
broadcast guide stream and a requested guide stream, the continually broadcast
IPG pages being a fraction of a plurality of available IPG pages, the guide portion of
the requested IPG page not being one of the continually broadcast IPG
pages~~wherein the requested guide stream includes a limited number of encoded~~
~~pages for the requested IPG page not included in said broadcast guide stream;~~

401816_1

Serial No. 09/687,662
Attorney Docket No.: SEDN/247CIP4
Page 6

a transport multiplexer coupled to the video encoder and operative to receive and multiplex the broadcast guide stream and the requested guide stream into a transport stream; and

a modulator coupled to the transport multiplexer and operative to receive the transport stream and generate an output signal suitable for transmission.

20. (Original) The system of claim 19, further comprising:

a session manager operative to receive a request message for the requested IPG page and direct the transport multiplexer to multiplex the requested guide stream into the transport stream.

21. (Original) The system of claim 20, wherein the session manager is further operative to receive an acknowledgement indicating that the requested IPG page has been received and, in response, direct the transport multiplexer to stop multiplexing the requested guide stream into the transport stream.

22-24. (Cancelled)